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ISELECT SYSTEM AND METHOD OF SELECTING AND EXCLUDING VIDEO SEGMENTS BASED UPON TAGS,

MARKERS, AND VIDEO PREFERENCES

IN THE CLAIMS

Please amend the claims as follows.

- 1. (Currently Amended) A method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream, said method comprising:
 - receiving a video stream, said video stream comprising a continuous series of video segments:
 - decoding encoding markers encoded within said video stream, said markers indicating having a position in said video stream that indicates a division divisions between said plurality of video segments of said video stream;
 - decoding encoding tags encoded within said video stream that indicate content of each video segment, each video segment having associated tags, said tags comprising selected key words and rating information relating to provide information relating to the content of an associated [[each]] video segment based on information from an electronic program guide and rating information of each video segment;
 - storing said markers and tags decoded from said video stream in a database; storing said video segments in a video storage, said video segments identified from said video stream using said markers; and
 - using video preference information of a [[said]] viewer to select [[said]] preferred video segments from said video storage and exclude said unwanted video segments by comparing said tags describing the content key words and said rating information of each video segment stored in said database with said video preference information of said viewer; and
 - inserting alternate video segments to replace said unwanted video segments if said comparison of said keywords or said rating information with said video preference information of said viewer is unfavorable.

2. (Canceled).

- 3. (Currently amended) The method of claim 1 wherein the step of encoding tags within said video stream and the step of encoding markers within said video stream comprise encoding tags and markers are encoded manually into said video stream by use of a computer within said video stream.
- 4. (Currently amended) The method of claim 1 wherein the step of encoding tags within said video stream and the step of encoding markers within said video stream comprise encoding tags and markers are encoded automatically by use of voice recognition techniques.
- 5. (Currently Amended) The method of claim 1 wherein said step of encoding markers within said video stream and the step of encoding tags within said video stream comprise automatically encoding said markers and said tags are encoded within said video stream based upon detection of change of scenes.
- 6. (Currently amended) The method of claim 1 wherein said step of <u>using video</u> preference information of said viewer to select selecting preferred video segments and excluding said unwanted video segments within said video stream comprises comparing key words that are input by said viewer with the <u>tags</u> key words that have been placed within said video stream.
- 7. (Currently amended) The method of claim 1 wherein said step of encoding tags within said video stream are encoded using comprises placing information from an Electronic Programming Guide into said video stream.
- 8. (Currently amended) The method of claim 1 wherein said step of encoding said tags within said video stream and said step of encoding said markers within said video stream are encoded further comprises placing said tags and said markers in a vertical blanking interval within said video stream.

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9. (Canceled).

10. (Currently Amended) The method of claim 1 <u>further comprising a wherein</u> said step of:

skipping to a next excluding said video segments comprises eliminating said excluded video segment upon receiving an input control signal from a user input device in said video stream and proceeding to a selected video segment.

11. (Currently Amended) The method of claim 1 <u>further comprising a wherein</u> said step of:

excluding said video segments that do not have tags that match any preferred content tags in said video preference information of said viewer comprises selecting said alternate video that replaces said excluded video segment.

12. (Currently Amended) The method of claim 1 <u>further comprising a wherein</u> said step of:

excluding said video segments that have tags that match undesired content tags in said video preference information of said viewer further comprises displaying a blank slate during an excluded video segment.

13. (Currently Amended) The method of claim 1 wherein said step of <u>using video</u> preference information of a viewer to select preferred video segments from said video storage selecting and excluding video segments in a video stream further comprises <u>sequentially</u> accessing said markers and tags stored in said database selecting and excluding video segments in video games.

14. (Canceled)

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15. (Currently Amended) A method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream comprising:

receiving a video stream, said video stream comprising a continuous series of video segments;

- decoding encoding markers encoded within said video stream, said markers indicating having a position in said video stream that indicates a division between said plurality of video segments of said video stream;
- decoding encoding tags encoded within said video stream, each video segment having associated tags that indicate provide information relating to the content of the [[each]] video segment, said tags comprising selected key words and rating information relating to the content of each video segment based on information from an electronic program guide and rating information of each video segment;
- storing preferred said video segments content at said viewer's premises in local a video storage, said video segments identified by said markers; and
- using video preference information of a [[said]] viewer to select [[said]] preferred video segments and exclude said unwanted video segments by comparing said tags key words and said rating information of each video segment with said video preference information of said viewer[[;]]
- downloading said preferred video segments from said video content stored in said local storage for viewing by said viewer; and
- inserting said downloaded preferred video segments to replace said unwanted video segments if said comparison of said keywords or said rating information with said video preference information of said viewer is unfavorable.

16. (Canceled)

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17. (Currently Amended) A method of selecting preferred video segments from a plurality of video segments in a video stream comprising:

receiving a video stream, said video stream comprising a continuous series of video segments;

- decoding encoding markers encoded within said video stream, said markers having a position in said video stream that indicates a division between said plurality of video segments of said video stream;
- decoding tags encoded encoding selected key words and rating information within said video stream, each video segment having associated tags, said tags provide information relating to the that indicate content of the associated [[each]] video segment based on information from an electronic program guide and rating information of each video segment;
- storing said video segments from said video stream in a local storage, said video segments identified from said video stream using said markers;
- using video preference information of a [[said]] viewer to select [[said]] preferred video segments by comparing said tags said key words and said rating information of each video segment with [[said]] video preference information of said viewer; and
- downloading storing said preferred video segments from said [[in]] local storage if said comparison of said tags key words or said rating information of each video segment with said video preference information is favorable.

18. (Canceled)

- 19. (Currently Amended) A system for selecting preferred video segments from a continuous series plurality of video segments in a video stream received by said system, said system to create a selected video stream to be viewed by a viewer comprising:
 - a decoder an encoder that decodes encodes said video stream with tags and markers to generate from an encoded video stream, said markers indicating divisions between said continuous series of video segments in said video stream, said tags provide information comprising selected key words relating to the content of said encoded video stream and

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rating information based on information from an electronic program guide and rating information of each an associated video segment;

- a <u>video segment database</u> set-top box that receives said encoded video stream and separates

 stores said tags and said markers <u>decoded</u> from said encoded video stream to generate an

 un-encoded video stream and separated tags and separated markers;
- a video storage for storing said video segments of said video stream received by said system, said video segments identified using said markers;
- <u>a user preference database, said user preference database storing viewer preferences from a viewer; and</u>
- a comparator, coupled to said set-top box, that receives said separated tags and said separated markers and viewer preferences and compares said key words of said tags from said video segment database with said viewer preferences to generate pointers that point to locations of video segments in a video database, and that select [[said]] preferred video segments from said video storage database and that exclude deselected video segments to generate a selected video stream; and
- the video database, coupled to said set-top box, that receives and stores said un-encoded video stream from said set-top box as video segments and that further receives said pointers from said comparator and uses said pointers to identify stored video segments that are authorized to be viewed and that further generates a selected video stream including said authorized video segments.
- 20. (Currently Amended) The system <u>as claimed in [[of]] claim 19, said system</u> further comprising:
 - a personal video recorder coupled to an input of said <u>system</u> set top box that filters said video stream to provide said video segments to be viewed by said viewer.
- 21. (Currently Amended) The system <u>as claimed in [[of]] claim 19 wherein said decoder set top box further comprises[[:]]</u> a video blanking interval decoder that separates said tags and said markers from said encoded video stream.

- 22. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said comparator sequentially access said tags and said markers in said video segment database set-top box further comprises: a filter/switch that uses comparison data to select and exclude said unencoded-video stream.
- 23. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said tags comprise information from an Electronic Program Guide content data relating to said video segment.
 - 24. (Canceled).
- 25. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers and said tags are encoded as analog data in said video stream to generate said encoded video stream.
- 26. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers and said tags are encoded as digital data in said video stream to generate said encoded video stream.
 - 27 28. (Canceled).
- 29. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between said video segments and said tags are inserted into said video stream to indicate content of each video segment by automatic detection of changes in flesh tone within said video stream.
- 30. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between said video segments

and said tags are inserted into said video stream to indicate content of each video segment by automatic detection of changes in audio levels within said video stream.

- 31. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between said video segments and said tags are inserted into said video stream to indicate content of each video segment by automatic detection of changes in light levels within said video stream.
- 32. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between said video segments and said tags are inserted into said video stream to indicate content of each video segment by automatic detection of changes in color within said video stream.
- 33. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between video segments by applying voice recognition software to said video stream.
- 34. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between said video segments and said tags are inserted into said video stream to indicate content of each video segment by automatic detection of changes in music within said video stream.
- 35. (Currently Amended) The system as claimed in [[of]] claim 19 wherein said markers are inserted into said video stream to indicate the division between said video segments and said tags are inserted into said video stream to indicate content of each video segment by automatic detection of changes in scenery within said video stream.

36. (Currently Amended) The system <u>as claimed in [[of]]</u> claim 19 wherein said plurality of video segments in said video stream comprise a live broadcast signal that is sent to said <u>system</u> set-top box at <u>said [[a]]</u> viewer's premises.

37. (Canceled)

38. (Currently Amended) The system <u>as claimed in [[of]] claim 19 further</u> comprising a viewer personalized remote control that transmits said <u>viewer video</u> preference information to said system and receives information from said system.

39 - 41. (Canceled).

- 42. (Currently Amended) A system for generating selecting one of an encoded primary regular video stream, that has been encoded with tags and markers, and an encoded alternate video stream that has been encoded with tags and markers, said system comprising: a plurality of video sources;
 - a switcher, said switcher coupled to said plurality of video sources, said switcher outputting a primary video signal and an alternate video signal;
 - a marker generator, said marker generator generating markers that designate divisions between video segments on said primary and alternate video signals;
 - a <u>first encoder video blanking interval decoder</u> that receives said <u>encoded</u> regular video <u>signal from said switcher</u> stream and <u>encodes</u> that separates said <u>primary</u> tags and said markers from said encoded regular into said <u>primary</u> video <u>signal stream</u> to create <u>separated tags and separated markers for each video segment of said an</u> encoded <u>primary</u> broadcast <u>video</u> and to create an un-encoded broadcast <u>video</u>, said tags comprising <u>selected key words relating to the content of said video stream, said primary tags</u> <u>describing content of said primary video signal based on information from an electronic program guide and rating information of each-video segment; and</u>

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a second encoder that receives said alternate video signal from said switcher and encodes

alternate tags and said markers into said alternate video signal to create an encoded

alternate video stream, said alternate tags describing content of said alternate video signal

a storage device that stores viewer preferences of a viewer;

- a comparator, coupled to said video blanking interval decoder, that receives said separated tags and said separated markers and said viewer preferences and compares said tags with said viewer preferences to generate tag comparison data to select one of said encoded regular video stream and said encoded alternate video stream;
- a filter/switch, coupled to said comparator and said video blanking interval decoder, that uses said tag comparison data to generate a request signal for said alternate video segments; a back channel that receives the request signal for said alternate video segments; and a video-on-demand system that receives said request signal for said alternate video segments over said back channel and sends said alternate video segments to said filter/switch for output to a display device.
- 43. (Currently Amended) The system <u>as claimed in [[of]] claim 42 further comprising a video content provider that generates said regular broadcast video stream and said alternate video stream comprising:</u>
 - a video stream source that generates multiple video sources;
 - a controller that generates control signals to control said switcher;
 - a switcher, coupled to said controller, that receives said control signals from said controller and generates said broadcast video stream and said alternate video stream.
- 44. (Currently Amended) The system <u>as claimed in [[of]] claim 43</u> wherein <u>one of said plurality of video sources stream source</u> comprises <u>a</u> studio <u>camera cameras that generate video streams</u>.
- 45. (Currently Amended) The system <u>as claimed in [[of]] claim 43</u> wherein <u>one of said plurality of video sources stream source</u> comprises a video tape bank.

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46. (Currently Amended) The system as claimed in [[of]] claim 43 wherein one of said plurality of video sources stream source comprises a receiver that receives a remote video signal stream from a remote source.

47. (Currently Amended) The system as claimed in [[of]] claim 43 further comprising:

a marker generator that generates markers;

a computer that generates custom tag information; and

voice recognition software, coupled to said computer, that generates said custom tag information;

a remote control that generates said custom tag information;

a keyboard that generates said custom tag information;

tag storage that stores said custom tag information.

48. (Canceled)

- 49. (Currently Amended) The system as claimed in [[of]] claim 43, wherein said alternate video stream comprises an alternate selection of video that replaces excluded video segments from said primary video stream.
- 50. (Currently Amended) The system as claimed in [[of]] claim 42 wherein said marker generator generates markers by automatic detection of changes in audio levels within said primary video signal further comprising an alternate video slate generator, coupled to said filter/switch, that generates an alternate video slate signal that is applied to said filter/switch.

51. (Canceled).

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52. (Currently Amended) The system as claimed in [[of]] claim 42 [[50]] wherein said marker generator generates markers by automatic detection of changes in light levels within said primary video signal alternate video slate signal comprises a screen saver.

- 53. (Currently Amended) The system of claim 42 [[50]] wherein said marker generator generates markers by automatic detection of changes in color within said primary yideo signal by automatic detection of changes in music alternate video slate signal comprises wall paper.
- 54. (Currently Amended) The system of claim 42 [[50]] wherein said marker generator generates markers by automatic detection of changes in music within said primary video signal alternate video slate signal comprises advertisements.
- 55. (Currently Amended) The system of claim 42 [[50]] wherein said marker generator generates markers by automatic detection of changes in scenery within said primary video signal alternate video slate signal comprises standard displays.
- 56. (Currently Amended) The system of claim 42 wherein said marker generator generates markers by automatic detection of changes in flesh tone within said primary video signal back channel is connected to an asymmetric system that uses standard telecommunications connections.
- 57. (Currently Amended) The system of claim 42 [[50]] wherein said marker generator generates markers by applying voice recognition software to said primary video signal back channel comprises a cable.

58 - 65. (Canceled).

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66. (Currently amended) The system <u>as claimed in [[of]] claim 19</u> wherein said tags and said markers are encoded within said video stream by using voice recognition.

- 67. (Currently amended) The system <u>as claimed in [[of]] claim 19 wherein said</u> tags and said markers are encoded within said video stream by automatic detection of changes in flesh tone and music within said video stream.
- 68. (Currently amended) The method of claim 1 wherein said step of encoding tags within said video stream and said step of encoding markers within said video stream are encoded compromise encoding tags and markers automatically by detecting changes in flesh tone and music within said video stream.

69 - 71. (Canceled).